



IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

Applicant : Parris *et al.*  
Serial No. : 10/717,138  
Filed : November 19, 2003  
Title : CRYSTAL STRUCTURE OF ACPS/ACP COMPLEX, SOLUTION  
STRUCTURE OF B. SUBTILIS ACP, AND USES THEREOF

Art Unit : 1652  
Examiner : Lindsay T. Odell

**MAIL STOP AMENDMENT**

Commissioner for Patents  
P.O. Box 1450  
Alexandria, VA 22313-1450

SUPPLEMENTAL INFORMATION DISCLOSURE STATEMENT

Applicants request consideration of the references listed on the attached PTO-1449 form.  
Copies of all the listed references are enclosed.

This statement is being filed before the receipt of a first Office Action on the merits. No fees are believed due. However, any necessary charges or credits should be applied to Deposit Account No. 06-1050, referencing Attorney Docket No. 16163-031002.

Respectfully submitted,

Date: May 3, 2005

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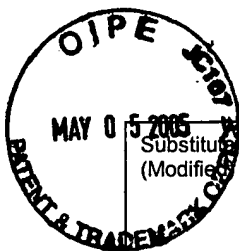
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Substitute Form PTO-1449 (Modified)	U.S. Department of Commerce Patent and Trademark Office	Attorney's Docket No. 16163-031002	Application No. 10/717,138
<b>Information Disclosure Statement by Applicant</b> (Use several sheets if necessary)  (37 CFR §1.98(b))		Applicant Parris <i>et al.</i>	
		Filing Date November 19, 2003	Group Art Unit 1652

U.S. Patent Documents							
Examiner Initial	Desig. ID	Document Number	Publication Date	Patentee	Class	Subclass	Filing Date If Appropriate
	AA						

Foreign Patent Documents or Published Foreign Patent Applications								
Examiner Initial	Desig. ID	Document Number	Publication Date	Country or Patent Office	Class	Subclass	Translation	
							Yes	No
	BA							

Other Documents (include Author, Title, Date, and Place of Publication)		
Examiner Initial	Desig. ID	Document
	CA	Baldwin <i>et al.</i> "Isolation and Partial Characterization of ACV Synthetase from <i>Cephalosporium acremonium</i> and <i>Streptomyces clavuligerus</i> Evidence for the Presence of Phosphopantothenate in ACV Synthetase" <i>J. Antibiot.</i> 44(2):241-248 (1991)
	CB	Banerjee <i>et al.</i> "inhA, a Gene Encoding a Target for Isoniazid and Ethionamide in Mycobacterium tuberculosis" <i>Science</i> 263(5144):227-230 (1994)
	CC	Bergler <i>et al.</i> "Protein EnvM Is the NADH-dependent Enoyl-ACP Reductase (FabI) of <i>Escherichia coli</i> " <i>J. Biol. Chem.</i> 269(8):5493-5496 (1994)
	CD	Crump <i>et al.</i> "Solution Structure of the Actinorhodin Polyketide Synthase Acyl Carrier Protein from <i>Streptomyces coelicolor</i> A3(2)" <i>Biochem.</i> 36:6000-6008 (1997)
	CE	Dessen <i>et al.</i> "Crystal Structure and Function of the Isoniazid Target of Mycobacterium tuberculosis" <i>Science</i> 267(5204):1638-1641 (1995)
	CF	Elovson <i>et al.</i> "Acyl Carrier Protein" <i>J. Biol. Chem.</i> 243(13):3603-3611 (1968)
	CG	Fischl <i>et al.</i> "Isolation and Properties of Acyl Carrier Protein Phosphodiesterase of <i>Escherichia coli</i> " <i>J. Bacteriol.</i> 172(9):5445-5449 (1990)
	CH	Furukawa <i>et al.</i> "Thiolactomycin Resistance in <i>Escherichia coli</i> Is Associated with the Multidrug Resistance Efflux Pump Encoded by <i>emrAB</i> " <i>J. Bacteriol.</i> 175(12):3723-3729 (1993)
	CI	Geiger <i>et al.</i> "Isolation of the <i>Rhizobium leguminosarum</i> NodF Nodulation Protein: NodF carries a 4'-Phosphopantetheine Prosthetic Group" <i>J. Bacteriol.</i> 173(9):2872-2878 (1991)
	CJ	Hill <i>et al.</i> "Overexpression, Purification, and Characterization of <i>Escherichia coli</i> Acyl Carrier Protein and Two Mutant Proteins" <i>Protein Expression and Purification</i> 6:394-400 (1995)
	CK	Holak <i>et al.</i> "Three-Dimensional Structure of Acyl Carrier Protein Determined by NMR Pseudoenergy and Distance Geometry Calculations" <i>Biochem.</i> 27:6135-6142 (1988)
	CL	Holak <i>et al.</i> "Three-dimensional structure of acyl carrier protein in solution determined by nuclear magnetic resonance and the combined use of dynamical simulated annealing and distance geometry" <i>Eur. J. Biochem.</i> 175:9-15 (1988)
	CM	Holak <i>et al.</i> "Improved strategies for the determination of protein structures from NMR data: the solution structure of acyl carrier protein" <i>FEBS Lett.</i> 242(2):218-224 (1989)
	CN	Hopwood <i>et al.</i> "Molecular Genetics of Polyketides and its Comparison to Fatty Acid Biosynthesis" <i>Annu. Rev. Genet.</i> 24:37-66 (1990)
	CO	Issartel <i>et al.</i> "Activation of <i>Escherichia coli</i> prohaemolysin to the mature toxin by acyl carrier protein-dependent fatty acylation" <i>Nature</i> 351:759-761 (1991)

Examiner Signature	Date Considered
EXAMINER: Initials citation considered. Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant.	

Substitute Form PTO-1449 (Modified)	U.S. Department of Commerce Patent and Trademark Office	Attorney's Docket No. 16163-031002	Application No. 10/717,138
<b>Information Disclosure Statement by Applicant</b> (Use several sheets if necessary) (37 CFR §1.98(b))		Applicant <b>Parris <i>et al.</i></b>	
		Filing Date November 19, 2003	Group Art Unit 1652

Other Documents (include Author, Title, Date, and Place of Publication)		
Examiner Initial	Desig. ID	Document
	CP	Kleinkauf <i>et al.</i> "A nonribosomal system of peptide biosynthesis" <i>Eur. J. Biochem.</i> 236(2):335-351 (1996)
	CQ	Lambalot <i>et al.</i> "A new enzyme superfamily – the phosphopantetheinyl transferases" <i>Chem. &amp; Biol.</i> 3(11):923-936 (1996)
	CR	Lambalot <i>et al.</i> "Cloning, Overproduction, and Characterization of the <i>Escherichia coli</i> Holo-acyl Carrier Protein Synthase" <i>J. Biol. Chem.</i> 270(42):24658-24661 (1995)
	CS	Lynen "On the Structure of Fatty Acid Synthetase of Yeast" <i>Eur. J. Biochem.</i> 112:431-442 (1980)
	CT	Magnuson <i>et al.</i> "Regulation of Fatty Acid Biosynthesis of <i>Escherichia coli</i> " <i>Microbiol. Reviews</i> 57:522-542 (1993)
	CU	Majerus <i>et al.</i> "Fatty Acid Biosynthesis and the Role of the Acyl Carrier Protein" <i>Advan. Lipid Res.</i> 5:1-33 (1967)
	CV	Marahiel "Multidomain enzymes involved in peptide synthesis" <i>FEBS Lett.</i> 307(1):40-43 (1992)
	CW	Prescott <i>et al.</i> "Acyl Carrier Protein" <i>Advan Enzymol. Relat. Areas Mol. Biol.</i> 36:269-311 (1972)
	CX	Quémard <i>et al.</i> "Enzymatic Characterization of the Target for Isoniazid in <i>Mycobacterium tuberculosis</i> " <i>Biochem.</i> 34:8235-8241 (1995)
	CY	Reuter <i>et al.</i> "Crystal structure of the surfactin synthetase-activating enzyme Sfp: a prototype of the 4'-phosphopantetheinyl transferase superfamily" <i>The EMBO J.</i> 18(23):6823-6831 (1999)
	CZ	Rock <i>et al.</i> "Improved Purification of Acyl Carrier Protein" <i>Anal. Biochem.</i> 102:362-364 (1980)
	CAA	Rusnak <i>et al.</i> "Biosynthesis of the <i>Escherichia coli</i> Siderophore Enterobactin: Sequence of the <i>entF</i> Gene, Expression and Purification of EntF, and Analysis of Covalent Phosphopantetheine" <i>Biochem.</i> 30:2916-2927 (1991)
	CBB	Sanyal <i>et al.</i> "Biosynthesis of Pimeloyl-CoA, a Biotin Precursor in <i>Escherichia coli</i> , Follows a Modified Fatty Acid Synthesis Pathway: <sup>13</sup> C-Labeling Studies" <i>J. Am. Chem. Soc.</i> 116:2637-2638 (1994)
	CCC	Shen <i>et al.</i> "Purification and Characterization of the Acyl Carrier Protein of the <i>Streptomyces glaucescens</i> Tetracenomycin C Polyketide Synthase" <i>J. Bacteriol.</i> 174(11):3818-3821 (1992)
	CDD	Takiff <i>et al.</i> "Locating Essential <i>Escherichia coli</i> Genes by Using Mini-Tn10 Transposons: the <i>pdxJ</i> Operon" <i>J. Bacteriol.</i> 174(5):1544-1553 (1992)
	CEE	Wakil <i>et al.</i> "Fatty Acids Synthesis and its Regulation" <i>Annu. Rev. Biochem.</i> 52:537-579 (1983)
	CFF	White "Stoichiometry and Stereochemistry of Deuterium Incorporated into Fatty Acids by Cells of <i>Escherichia coli</i> Grown on [methyl- <sup>2</sup> H <sub>3</sub> ]Acetate" <i>Biochemistry</i> 19:9-15 (1980)
	CGG	

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